

```
1-2 3-4
ring/chain bonds:
2-3
exact/norm bonds:
1-2 2-3 3-4

Match level:
```

1:CLASS 2:CLASS 3:CLASS 4:CLASS

1 4

ring/chain nodes :
 2 3
chain bonds :

=> d his

(FILE 'HOME' ENTERED AT 16:07:44 ON 19 FEB 2006) FILE 'REGISTRY' ENTERED AT 16:07:49 ON 19 FEB 2006 L1 375 S SUCCINONITRILE L21 S SUCCINONITRILE/CN L3 STRUCTURE UPLOADED L450 S L3 L5 66602 S 5-7/SZ L6 2228 S C3N2-C5N2/EA FILE 'CAPLUS' ENTERED AT 16:11:41 ON 19 FEB 2006 2546 S L1 L7 1465 S L6 L8 L9 2 S L7 AND L8 FILE 'REGISTRY' ENTERED AT 16:12:33 ON 19 FEB 2006 3703 S L3 SSS FUL L10 FILE 'CAPLUS' ENTERED AT 16:12:41 ON 19 FEB 2006 4057 S L10 L11 L12 3 S L8 AND L11 L13 1 S L12 NOT L9 FILE 'REGISTRY' ENTERED AT 16:15:13 ON 19 FEB 2006 STRUCTURE UPLOADED L14 L15 50 S L14 L16 41797 S L14 SSS FUL FILE 'CAPLUS' ENTERED AT 16:15:52 ON 19 FEB 2006 24741 S L16 L17

=> d ibib abs hitstr total

8 S L8 AND L17

L18

```
10/724,545
   ANSWER 1 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
                          2006:99766 CAPLUS
ACCESSION NUMBER:
                          STAT3 decoy oligonucleotides and use in the treatment
                          of cancer
                          Grandis, Jennifer, Rubin; Johnson, Daniel, E.; Leong,
INVENTOR(S):
                          Paul
PATENT ASSIGNEE(S):
                          University of Pittsburgh - Of the Commonwealth System
                          of Higher Education, USA
SOURCE:
                          PCT Int. Appl., 67 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                          KIND
                                  DATE
                                             APPLICATION NO.
                                                                       DATE
                                               -----
     _____
                          ----
                                  _____
     WO 2006012625
                           A2
                                  20060202 WO 2005-US26361
                                                                       20050722
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                               US 2004-590747P
                                                                   P 20040722
     A composition is provided that is useful in treating cancers in which STAT3 is
AB
     activated, such as squamous cell carcinomas including squamous cell
     carcinoma of the head and neck. The composition comprises an effective amount
of
     a STAT3 decoy and a pharmaceutically acceptable carrier. Also provided
     are methods of treating such cancers and methods of modulating STAT3
     transcriptional activation in a cell.
IT
     INDEXING IN PROGRESS
     53910-25-1, Pentostatin 109511-58-2
IT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (STAT3 decoy oligonucleotides and use in treatment of cancer)
```

Imidazo [4,5-d] [1,3] diazepin-8-ol, $3-(2-\text{deoxy}-\beta-D-\text{erythro}-\beta-D-\text{erythro})$

pentofuranosyl)-3,4,7,8-tetrahydro-, (8R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

53910-25-1 CAPLUS

RN

CN

ANSWER 2 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:759869 CAPLUS

DOCUMENT NUMBER: 141:243771

TITLE: Process for the stereoselective synthesis of

pentostatin aglycon and pentostatin via cyclization of

dinitrile derivatives with amines

INVENTOR(S): Sourena, Nadji; Smoot, James; Sampath, Umashanker

PATENT ASSIGNEE(S):

SOURCE: U.S. Pat. Appl. Publ., 21 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----______ US 2004181052 Δ1 20040916 US 2003-734545 20031212 PRIORITY APPLN. INFO.: US 2002-432380P P 20021212

MARPAT 141:243771 OTHER SOURCE(S):

GI

AB A novel, scalable and improved process for preparing pentostatin and its analogs via stereoselective cyclization is disclosed. The method comprises the diastereospecific synthesis of the nucleobase from com. available L-dialkyl tartrate. Cyclization of dinitrile derivs., e.g. I, with a number of amines, e.g. allylamine, was performed to examine the practicality of the formation of the imidazole ring via the nucleophilic addition of an amino group to an electrophilic cyano functionality.

TT 749917-70-2P 749917-71-3P 749917-79-1P RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (process for stereoselective synthesis of pentostatin aglycon and

pentostatin via cyclization of dinitrile derivs. with amines)

RN 749917-70-2 CAPLUS

Carbamic acid, [(1S,2S)-1,2-dicyano-2-[[(1,1-dimethylethyl)diphenylsilyl]o CN xy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 749917-71-3 CAPLUS

CN Butanedinitrile, 2-amino-3-[{(1,1-dimethylethyl)diphenylsilyl]oxy]-, (2S,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 749917-79-1 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine, 8-[[(1,1-dimethylethyl)diphenylsilyl]oxy]3,6,7,8-tetrahydro-6-(3-nitrobenzoyl)-3-(phenylmethyl)-, (8R)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

IT 749917-72-4P 749917-81-5P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(process for stereoselective synthesis of pentostatin aglycon and pentostatin via cyclization of dinitrile derivs. with amines)

RN 749917-72-4 CAPLUS

Absolute stereochemistry.

Double bond geometry as shown.

RN 749917-81-5 CAPLUS
CN Imidazo[4,5-d][1,3]diazepine, 8-[[(1,1-dimethylethyl)diphenylsilyl]oxy]3,4,7,8-tetrahydro-3-(phenylmethyl)-, (8R)- (9CI) (CA INDEX NAME)

INVENTOR (S):

L18 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:33978 CAPLUS

DOCUMENT NUMBER: 140:94236

TITLE: Preparation of ring-expanded nucleosides and

nucleotides as virucides and bactericides Hosmane, Ramachandra S.; Sood, Ramesh K.

PATENT ASSIGNEE(S): Nabi, USA; University of Maryland Baltimore County

SOURCE: U.S., 51 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|-----------|-------------------|----------|
| | | | | |
| US 6677310 | B1 | 20040113 | US 1999-295303 | 19990421 |
| US 2004077564 | A1 | 20040422 | US 2003-679429 | 20031007 |
| PRIORITY APPLN. INFO.: | | | US 1994-268570 B2 | 19940706 |
| | | | US 1995-518278 A3 | 19950823 |
| | | | US 1998-96614 B1 | 19980612 |
| | | | US 1999-290615 B2 | 19990413 |
| | | | US 1999-295303 A3 | 19990421 |
| OTHER SOURCE(S): | MARPAT | 140:94236 | | |

GI

AB The present invention relates to compns. comprising analogs of purine nucleosides containing a ring-expanded ("fat") heterocyclic ring, in place of purine, and an unmodified or modified sugar residue, pharmaceutically acceptable derivs. of such compns., as well as methods of use thereof. particular, these compns. may be utilized in the treatment of certain cancers, bacterial, fungal, parasitic, and viral infections, including, but not limited to, Acquired Immunodeficiency Syndrome (AIDS), hepatitis, Epstein-Barr and cytomegalovirus. The present invention relates to compns. comprising analogs of purine nucleosides containing a ring-expanded ("fat") heterocyclic ring, I (R1, R3, R5 = independently NH, NH2, O, OH, S, SH. NH-alkyl, N-alkyl, O-alkyl, S-alkyl, NH-aryl, O-aryl, S-aryl; R2, R4, R7, R8 = independently , H, alkyl, substituted Ph, heterocycle, aralkyl; R6 = H, alkyl, Ph, substituted Ph, heterocycle, aralkyl, glycosyl; U, X, Y, Z, W, J, K, L = C, N) in place of purine, and an unmodified or modified sugar residue, pharmaceutically acceptable derivs. of such compns., as well as methods of use thereof. In particular, these compns. may be utilized in the treatment of certain cancers, bacterial, fungal, parasitic, and viral infections, including, but not limited to, Acquired Immunodeficiency Syndrome (AIDS) and hepatitis.

6-Amino-6-methoxycarbonyl-4,5,7,8-tetrahydro-6H-imidazo[4,5,e]-[1,4]diazepine-5,8-dione was prepared as adenosine deaminase and guanase inhibitor and tested for its anti-retroviral and antibacterial activities. IT 155568-35-7P 155568-37-9P 155568-38-0P 159530-81-1P 159530-82-2P 162009-82-7P 169317-86-6P 169317-87-7P 216988-27-1P 224789-90-6P 244195-63-9P 398127-00-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of ring-expanded nucleosides and as virucides and bactericides) RN155568-35-7 CAPLUS Imidazo[4,5-e][1,4]diazepine-5,8-dione, 3,4,6,7-tetrahydro-3,4,7-CN tris(phenylmethyl) - (9CI) (CA INDEX NAME)

$$Ph-CH_2$$
 N
 N
 CH_2-Ph
 CH_2-Ph

RN 155568-37-9 CAPLUS
CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 2-bromo-3,4,6,7-tetrahydro-3,4-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 155568-38-0 CAPLUS
CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 2-bromo-3,4,6,7-tetrahydro-3,4,7tris(phenylmethyl)- (9CI) (CA INDEX NAME)

$$Ph-CH_2$$
 N
 N
 CH_2-Ph
 CH_2-Ph

RN 159530-81-1 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-6-carboxylic acid, 6-amino-1,4,5,6,7,8-hexahydro-5,8-dioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & & & & H \\
 & & & & H \\
 & & & & M \\
 & & & & & M \\
 & & & & M \\
 & &$$

RN 159530-82-2 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-6-carboxylic acid, 1,4,5,6,7,8-hexahydro-6-methoxy-5,8-dioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & H \\ & & & & H \\ & & & & \\ MeO-C & & & M \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ \end{array}$$

RN 162009-82-7 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1- β -D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169317-86-6 CAPLUS

CN Imidazo[4,5-d][1,3]diazepin-5(1H)-one, 4,6,7,8-tetrahydro-8-hydroxy-1- β -D-ribofuranosyl- (9CI) (CA INDEX NAME)

RN 169317-87-7 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 1,4,6,7-tetrahydro-6-hydroxy-(9CI) (CA INDEX NAME)

RN 216988-27-1 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1- β -D-ribofuranosyl-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 224789-90-6 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8(1H,5H)-dione, 6-amino-1- β -D-ribofuranosyl- (9CI) (CA INDEX NAME)

RN 244195-63-9 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6-diamine, 1,8-dihydro-1-[5-0[hydroxy[[hydroxy(phosphonooxy)phosphinyl]]-β-Dribofuranosyl]-8-imino- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 398127-00-9 CAPLUS

CN Ethanol, 2-[(6,8-diamino-4-iminoimidazo[4,5-e][1,3]diazepin-1(4H)-yl)methoxy]- (9CI) (CA INDEX NAME)

$$NH_2$$
 NH_2
 NH_2
 $CH_2-O-CH_2-CH_2-OH$

IT 1122-28-7, 4,5-Dicyanoimidazole

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of ring-expanded nucleosides and as virucides and bactericides)

RN 1122-28-7 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 123124-90-3 CAPLUS CN 1H-Imidazole-4,5-dicarbonitrile, 1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 139173-33-4 CAPLUS
CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 3,4,6,7-tetrahydro-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 139173-34-5 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro- (9CI) (CA INDEX NAME)

RN 139173-35-6 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 3,4,6,7-tetrahydro-3-(2,3,5-tri-0-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 139173-36-7 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro-1-(2,3,5-tri-0-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

RN 139173-38-9 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro-1-β-Dribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 162009-80-5 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6-diamine, 1,8-dihydro-8-imino-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 162009-81-6 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1-(2,3,5-tri-O-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

RN 169317-84-4 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino- (9CI) (CA INDEX NAME)

RN 169317-88-8 CAPLUS

CN Methanesulfonic acid, trifluoro-, compd. with 1,6-dihydro-6-imino-1-(2,3,5tri-O-benzoyl-β-D-ribofuranosyl)imidazo[4,5-e][1,3]diazepine-4,8diamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 162009-81-6 CMF C32 H27 N7 O7

Absolute stereochemistry.

CM 2

CRN 1493-13-6 CMF C H F3 O3 S

RN 169317-91-3 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 3,4,6,7-tetrahydro-6-methoxy-3,4-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Ph-CH2} & \text{CH2-Ph} \\ \text{O} & & \\ \\ \text{MeO-N} & \\ \\ \text{N} & \\ \\ \text{O} & \\ \end{array}$$

RN 169317-92-4 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 3,4,6,7-tetrahydro-6-hydroxy-3,4-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 216988-26-0 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8(1H,5H)-dione, 6-amino-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 216988-28-2 CAPLUS
CN 1H-Imidazole-4,5-dicarbonitrile, 1-β-D-ribofuranosyl- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2000:741924 CAPLUS 133:305586 DOCUMENT NUMBER: TITLE: Methods of inducing cancer cell death and tumor regression INVENTOR(S): Bishop, Walter R.; Brassard, Diana L.; Nagabhushan, Tattanahalli L. PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: PCT Int. Appl., 84 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE --------------WO 2000061145 A1 20001019 WO 2000-US9124 20000406 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 1999-289255 US 6316462 20011113 B1 19990409 CA 2364675 20001019 CA 2000-2364675 AA 20000406 EP 1165078 EP 2000-921765 20020102 A1 20000406 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO BR 2000009670 20020115 BR 2000-9670 Α 20000406 JP 2003529540 T2 20031007 JP 2000-610478 20000406 NZ 514628 NZ 2000-514628 Α 20040130 20000406 AU 783177 AU 2000-42041 B2 20050929 20000406 ZA 2001008258 ZA 2001-8258 Α 20030108 20011008 PRIORITY APPLN. INFO.: US 1999-289255 A 19990409 W 20000406 WO 2000-US9124 AΒ Methods are provided for treating cancer, comprising administering (1) a farnesyl protein transferase inhibitor in conjunction with (2) an addnl. Ras signaling pathway inhibitor to induce cancer cell death and tumor regression. IT 53910-25-1, Pentostatin 109511-58-2, U0126

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

> (methods of inducing cancer cell death and tumor regression with farnesyl protein transferase inhibitors in conjunction with Ras signaling pathway inhibitors and use of other antitumor agents)

RN 53910-25-1 CAPLUS

CN Imidazo [4,5-d] [1,3] diazepin-8-ol, 3- $(2-deoxy-\beta-D-erythro$ pentofuranosyl)-3,4,7,8-tetrahydro-, (8R)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:785657 CAPLUS

DOCUMENT NUMBER: 130:38644

TITLE: Preparation of ring-expanded nucleosides and nucleotides as virucides and bactericides

INVENTOR(S): Hosmane, Ramachandra; Burns, Barry PATENT ASSIGNEE(S): University of Maryland, USA; Nabi

SOURCE: U.S., 24 pp., Cont.-in-part of U.S. Ser. No. 268,570,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | | |
|------------------------|------|----------|-----------------|------|----------|--|
| | | | | - | | |
| US 5843912 | Α | 19981201 | US 1995-518278 | | 19950823 | |
| US 2004077564 | A1 | 20040422 | US 2003-679429 | | 20031007 | |
| PRIORITY APPLN. INFO.: | | | US 1994-268570 | B2 | 19940706 | |
| | | | US 1995-518278 | Α3 | 19950823 | |
| | | | US 1998-96614 | B1 | 19980612 | |
| | | | US 1999-290615 | B2 | 19990413 | |
| | | | US 1999-295303 | A3 | 19990421 | |

OTHER SOURCE(S): MARPAT 130:38644

GI

AB The present invention relates to compns. comprising analogs of purine nucleosides containing a ring-expanded ("fat") heterocyclic ring, I (R1, R3, R5 = independently NH, NH2, O, OH, S, SH. NH-alkyl, N-alkyl, O-alkyl, S-alkyl, NH-aryl, O-aryl, S-aryl; R2, R4, R7, R8 = independently , H, alkyl, substituted Ph, heterocycle, aralkyl; R6 = H, alkyl, Ph, substituted Ph, heterocycle, aralkyl, glycosyl, ; U, X, Y, Z, W, J, K, L =C, N) in place of purine, and an unmodified or modified sugar residue, pharmaceutically acceptable derivs. of such compns., as well as methods of use thereof. In particular, these compns. may be utilized in the treatment of certain cancers, bacterial, fungal, parasitic, and viral infections, including, but not limited to, Acquired Immunodeficiency Syndrome (AIDS) and hepatitis. 6-Amino-6-methoxycarbonyl-4,5,7,8tetrahydro-6H-imidazo[4,5,e]-[1,4]-diazepine-5,8-dione was prepared as adenosine deaminase and guanase inhibitor and tested for its anti-retroviral and antibacterial activities.

IT 159530-81-1P 159530-82-2P 162009-82-7P 169317-86-6P 169317-87-7P 216988-27-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

RN 159530-82-2 CAPLUS
CN Imidazo[4,5-e][1,4]diazepine-6-carboxylic acid, 1,4,5,6,7,8-hexahydro-6-methoxy-5,8-dioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & H \\ & & & & \\ MeO-C & & & M \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ \end{array}$$

RN 162009-82-7 CAPLUS
CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1-β-Dribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169317-86-6 CAPLUS
CN Imidazo[4,5-d][1,3]diazepin-5(1H)-one, 4,6,7,8-tetrahydro-8-hydroxy-1β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

RN 169317-87-7 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 1,4,6,7-tetrahydro-6-hydroxy-(9CI) (CA INDEX NAME)

RN 216988-27-1 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1- β -D-ribofuranosyl-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

IT 1122-28-7, 4,5-Dicyanoimidazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of ring-expanded nucleosides and as virucides and bactericides)

RN 1122-28-7 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 123124-90-3 CAPLUS CN 1H-Imidazole-4,5-dicarbonitrile, 1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 139173-33-4 CAPLUS
CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 3,4,6,7-tetrahydro-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 139173-34-5 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro- (9CI) (CA INDEX NAME)

RN 139173-35-6 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 3,4,6,7-tetrahydro-3-(2,3,5-tri-0-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 139173-36-7 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro-1-(2,3,5-tri-0-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

RN 139173-38-9 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro-1- β -D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 162009-80-5 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6-diamine, 1,8-dihydro-8-imino-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ N & & & \\ & & & \\ NH_2 & & \\ & & & \\ NH_2 & & \\ \end{array}$$

RN 162009-81-6 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1-(2,3,5-tri-O-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

RN 169317-84-4 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino- (9CI) (CA INDEX NAME)

RN 169317-88-8 CAPLUS

CN Methanesulfonic acid, trifluoro-, compd. with 1,6-dihydro-6-imino-1-(2,3,5tri-O-benzoyl-β-D-ribofuranosyl)imidazo[4,5-e][1,3]diazepine-4,8diamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 162009-81-6 CMF C32 H27 N7 O7

Absolute stereochemistry.

CM 2

CRN 1493-13-6 CMF C H F3 O3 S

RN 169317-91-3 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 3,4,6,7-tetrahydro-6-methoxy-3,4-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Ph-CH}_2 & \text{CH}_2\text{--Ph} \\ \text{O} & & \\ \\ \text{MeO} & & \\ \\ N & \\ N & \\ \\ \end{array}$$

RN 169317-92-4 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 3,4,6,7-tetrahydro-6-hydroxy-3,4-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

HO N
$$CH_2-Ph$$

RN 216988-26-0 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8(1H,5H)-dione, 6-amino-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

Absolute stereochemistry.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

n 10/734,545

L18 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:878823 CAPLUS

DOCUMENT NUMBER: 123:286534

TITLE: Preparation of ring-expanded bases, nucleosides and

nucleotides as virucides, bactericides, fungicides,

and parasiticides.

INVENTOR(S):
Burns, Barry; Hosmane, Ramachandra

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | | | | | | | | APPLICATION NO. | | | | | | | | | | |
|----------|------------|------|------|-----|----------------------------------|-----|-----------------|-----------------|----------------|----------------|-------|-------|-----|-------------|----------|-------|-----|----|
| | WO 9509175 | | | | | | WO 1994-US10905 | | | | | | | | | | | |
| | | | | | | | BR, | | | | | | | | | | | |
| | | GE, | HU, | JP, | ΚE, | KG, | KP, | KR, | KZ, | LK, | LT, | LU, | LV, | MD, | MG, | MN, | MW, | |
| | | ΝL, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SI, | SK, | ТJ, | TT, | UA, | UΖ, | VN | |
| | RW: | KE, | MW, | SD, | SZ, | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | ΙE, | IT, | LU, | |
| | | MC, | ΝL, | PΤ, | SE, | BF, | BJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | ML, | MR, | ΝE, | SN, | |
| | | TD, | | | | | | | | | | | | | | | | |
| | 2173 | | | | | | | | | | | | | | | | | |
| | | | | | A1 19950418 AU 1994-78445 199409 | | | | | | | | | | | | | |
| | | | | | A1 19960807 | | | | | EP 1994-929358 | | | | | 19940929 | | | |
| EP | 7245 | 87 | | | B1 | | 2002 | 0904 | | | | | | | | | | |
| | | | | | | | ES, | | | | | | | | | | - | SE |
| | 1227 | | | | | | | | | EP 2 | 002- | 1587 | | | 1 | 9940 | 929 | |
| EP | 1227 | | | | | | | | | | | | | | | | | |
| | | | | | • | | ES, | • | • | | • | • | | | | • | • | ΙE |
| AT | 2234 | 28 | | | E | | 2002 | 0915 | | AT 1 | 994- | 9293 | 58 | | 1 | 9940: | 929 | |
| PT | 7245 | 87 | | | T | | 2003 | 0131 | | PT 1 | 994 - | 9293 | 58 | | 1 | 9940 | 929 | |
| | 2182 | | | | T3 | | 2003 | 0316 | | | | | | | | | | |
| PRIORITY | Y APP | LN. | INFO | . : | | | | | | | 993- | | | | | | | |
| | | | | | | | | | EP 1994-929358 | | | | | A3 19940929 | | | | |
| | | | | | | | | | | WO 1 | 994-1 | US10: | 905 | 1 | W 1 | 9940 | 929 | |
| OTHER SO | DURCE | (S): | | | MAR | PAT | 123: | 2865 | 34 | | | | | | | | | |

$$\begin{array}{c|c}
R^1 \\
\parallel & (R^8)_a \\
U & J \\
\downarrow & K(R^7)_a \\
R^3 = Y & \parallel & L \\
\downarrow & L \\
\downarrow & L \\
\downarrow & (R^6)_a
\end{array}$$

$$\begin{array}{c|c}
& X \\
\downarrow & X \\$$

AB Title compds. [I; R1, R3, R5 = NH, NH2, O, OH, S, SH, alkoxy, alkylthio, alkylamino, alkylimino, (substituted) aryloxy, arylamino, arylthio,

Ι

GI

glycosylamino, glycosylimino, etc.; R2, R4, R6, R7, R8 = H, alkyl, (substituted) aryl, aralkyl, glycosyl, etc.; U, X, Y, Z, W, J, K, L = C, N, O, P, S; a = 0, 1] and related compds., were prepared Thus, 4,5-dicyanoimidazole, 1-O-acetyl-2,3,5-tri-O-benzoyl- β -D-ribofuranose, hexamethyldisilazane, Me3SiCl, and F3CSO3H were stirred in MeCN in an ice water bath to give 94% 1-(2,3,5-tri-O-benzoyl- β -D-ribofuranosyl)-4,5-dicyanoimidazole. The latter was refluxed overnight with guanidine hydrochloride and NaOMe in MeOH to give 40% 4,6,8-triimino-1- β -D-ribofuranosylimidazo[4,5-e][1,3]diazepine. The latter inhibited adenosine deaminase with Ki = 3.85-4 + 10-4 M. 159530-81-1P 159530-82-2P 162009-80-5P

IT 159530-81-1P 159530-82-2P 162009-80-5P 162009-82-7P 169317-84-4P 169317-85-5P 169317-86-6P 169317-87-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ring-expanded bases, nucleosides and nucleotides as virucides, bactericides, fungicides, and parasiticides)

RN 159530-81-1 CAPLUS

Imidazo[4,5-e][1,4]diazepine-6-carboxylic acid, 6-amino-1,4,5,6,7,8hexahydro-5,8-dioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & H \\ & & & H \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

CN

RN 159530-82-2 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-6-carboxylic acid, 1,4,5,6,7,8-hexahydro-6-methoxy-5,8-dioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{MeO} - C & & \\ & & & \\ & & & \\ \end{array}$$

RN 162009-80-5 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6-diamine, 1,8-dihydro-8-imino-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 162009-82-7 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1- β -D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169317-84-4 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino- (9CI) (CA INDEX NAME)

RN 169317-85-5 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8(1H,5H)-dione, 6-amino- (9CI) (CA INDEX NAME)

RN 169317-86-6 CAPLUS

CN Imidazo[4,5-d][1,3]diazepin-5(1H)-one, 4,6,7,8-tetrahydro-8-hydroxy-1-β-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 169317-87-7 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 1,4,6,7-tetrahydro-6-hydroxy-(9CI) (CA INDEX NAME)

IT 139173-35-6P

RL: BYP (Byproduct); PREP (Preparation)
(preparation of ring-expanded bases, nucleosides and nucleotides as virucides, bactericides, fungicides, and parasiticides)

RN 139173-35-6 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 3,4,6,7-tetrahydro-3-(2,3,5-tri-0-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 1122-28-7, 4,5-Dicyanoimidazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of ring-expanded bases, nucleosides and nucleotides as virucides, bactericides, fungicides, and parasiticides)

RN 1122-28-7 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile (9CI) (CA INDEX NAME)

IT 94619-73-5P 123124-90-3P 139173-33-4P 139173-34-5P 139173-36-7P 139173-38-9P 169317-88-8P 169317-91-3P 169317-92-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of ring-expanded bases, nucleosides and nucleotides as virucides, bactericides, fungicides, and parasiticides)

RN 94619-73-5 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile, 1-(2,3,5-tri-O-benzoyl-β-Dribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 123124-90-3 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile, 1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 139173-33-4 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 3,4,6,7-tetrahydro-3-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 139173-34-5 CAPLUS
CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro- (9CI) (CF INDEX NAME)

RN 139173-36-7 CAPLUS
CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro-1-(2,3,5-tri-0-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 139173-38-9 CAPLUS

CN Imidazo[4,5-d][1,3]diazepine-5,8-dione, 1,4,6,7-tetrahydro-1- β -D-ribofuranosyl- (9CI) (CA INDEX NAME)

RN 169317-88-8 CAPLUS

CN Methanesulfonic acid, trifluoro-, compd. with 1,6-dihydro-6-imino-1-(2,3,5tri-O-benzoyl-β-D-ribofuranosyl)imidazo[4,5-e][1,3]diazepine-4,8diamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 162009-81-6 CMF C32 H27 N7 O7

Absolute stereochemistry.

CM 2

CRN 1493-13-6 CMF C H F3 O3 S

RN 169317-91-3 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 3,4,6,7-tetrahydro-6-methoxy-3,4-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 169317-92-4 CAPLUS

CN Imidazo[4,5-e][1,4]diazepine-5,8-dione, 3,4,6,7-tetrahydro-6-hydroxy-3,4-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

HO N
$$CH_2-Ph$$

Page 36

L18 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:273394 CAPLUS

DOCUMENT NUMBER: 122:214413

TITLE: A short synthesis of a novel ring-expanded purine and

its nucleoside analog containing the

imidazo[4,5-e][1,3]diazepine ring skeleton with

multiple amino substituents attached to the 7-membered

ring

AUTHOR(S): Wang, Lijuan; Bhan, Anila; Hosmane, Ramachandra S.;

Guiles, R. D.

CORPORATE SOURCE: Dep. of Chemistry and Biochemistry, Univ. of Maryland

Baltimore County, Baltimore, MD, 21228, USA

SOURCE: Nucleosides & Nucleotides (1994), 13(10), 2307-20

CODEN: NUNUD5; ISSN: 0732-8311

PUBLISHER: Dekker
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 122:214413

GΙ

$$NH_2$$
 NH_2
 NH_2

The synthesis of 4,6,8-triaminoimidazo[4,5-e][1,3]diazepine (I) and its nucleoside analog (II) are reported. The heterocycle was prepared in a single step by condensation of 4,5-dicyanoimidazole with guanidine. The 5,7-fused ring structure of I was distinguished from the other possible 5:5-fused isomer by preparing the 15N-labeled heterocycle (1*) and exploring its 15N-1H coupling patterns in both 1H and 15N NMR spectra. These spectral patterns also enabled establishment of the triamino tautomeric form of I as assigned. Compound I, a novel ring-expanded ("fat") analog of purine, is anticipated to be planar and aromatic as predicted by mol. modeling. The 1-benzyl analog (III), a protocol for the ribosyl analog II, was similarly prepared from 1-benzyl-4,5-dicyanoimidazole. The nucleoside II was prepared by the modified Vorbrueggen ribosylation of I.

The position of ribosylation was unequivocally established by an unambiguous synthesis of II from condensation of 1-(2',3',5'-tri-O-benzoyl- β -D-ribofuranosyl)-4,5-dicyanoimidazole (IV) with guanidine in a solution of sodium methoxide in methanol. The nucleoside IV was prepared by the Vorbrueggen ribosylation of 4,5-dicyanoimidazole.

IT 94619-73-5P 123124-90-3P 162009-79-2P

162009-80-5P 162009-81-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(a short synthesis of a novel ring-expanded aminopurine and nucleoside analog)

RN 94619-73-5 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile, 1-(2,3,5-tri-O-benzoyl-β-Dribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 123124-90-3 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile, 1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 162009-79-2 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6,8-triamine (9CI) (CA INDEX NAME)

RN 162009-80-5 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6-diamine, 1,8-dihydro-8-imino-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 162009-81-6 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1-(2,3,5-tri-O-benzoyl-β-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 162009-82-7P 162009-83-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(a short synthesis of a novel ring-expanded aminopurine and nucleoside analog)

RN 162009-82-7 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,8-diamine, 1,6-dihydro-6-imino-1-β-Dribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 162009-83-8 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6,8-triamine-N6,5,7-15N3 (9CI) (CA INDEX NAME)

IT **1122-28-7**, 4,5-Dicyanoimidazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction with guanidine)

RN 1122-28-7 CAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile (9CI) (CA INDEX NAME)

ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:198331 CAPLUS

DOCUMENT NUMBER: 112:198331

TITLE: Imidazo[4,5-e][1,3]diazepine-4,6-dione. A novel

xanthine analog

AUTHOR(S): Bridson, Peter K.; Lambert, Steven J.

CORPORATE SOURCE: Dep. Chem., Memphis State Univ., Memphis, TN, 38152,

USA

SOURCE: Journal of the Chemical Society, Perkin Transactions

1: Organic and Bio-Organic Chemistry (1972-1999)

(1990), (1), 173-5

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 112:198331

GI

AB Imidazolylcarbonylaminomethylimidazolecarboxamide I was treated with Ac20 in anhydrous dioxan to give 40% benzyldihydroimidazodiazepinedione II (R = PhCH), which on hydrogenolysis gave II (R = H).

IT 126921-91-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and debenzylation of)

RN 126921-91-3 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6(1H,5H)-dione, 7,8-dihydro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

HN N CH2-Ph

IT 126921-83-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 126921-83-3 CAPLUS

CN Imidazo[4,5-e][1,3]diazepine-4,6(1H,5H)-dione, 7,8-dihydro- (9CI) (CAINDEX NAME)